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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,894	02/27/2004	Yoshitaka Suzuki	14225.10US01	9320

7590 11/07/2007

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EXAMINER	
HAUGLAND, SCOTT J	
ART UNIT	PAPER NUMBER
3654	

MAIL DATE	DELIVERY MODE
11/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/789,894	SUZUKI ET AL.	
	Examiner	Art Unit	
	Scott Haugland	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *10-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *10-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/12/07 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims do not recite any structure (such as ECU 18) to support the operation of the motor recited in claim 10, lines 10-22 and claim 13, lines 10-24. A typical electric motor would be capable of being operated as claimed.

It appears that "predetected" in claim 10, line 11 and claim 13, line 11 should be

--predicted-- for consistency with claim 10, line 15, claim 13, line 15 and the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of the page 1 (last two lines) and page 2 of the specification in view of Fohl (U.S. Pat. No. 4,109,881)

The admitted prior art discloses a seat belt device comprising a retractor including a reel, ratchet teeth, and ratchet claw. The seat belt device further comprises a weight responsive to acceleration to effect engagement of the claw and an electric motor driven to take up webbing based on a collision predicting signal generated by a device separate from the weight.

The admitted prior art does not disclose that the motor is driven in the normal direction to cancel locking of the reel after the collision predicting signal has disappeared.

Fohl teaches driving a motor (return spring; col. 2, lines 59-61) of a seat belt retractor in a normal (tightening) direction to cancel locking of the retractor (by ratchet pawl 10), thereby loosening the webbing (col. 10, lines 1-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide rotate the motor of the admitted prior art in the normal (tightening) direction to release the ratchet pawl from the ratchet teeth as taught by Fohl to eliminate the need for a separate actuator for releasing the pawl. It would have been obvious to release the pawl when the signal indicating the possibility of a collision has disappeared since the pawl must be engageable in this condition to serve its intended purpose.

With regard to claim 12, it would have been obvious to obtain the collision predicting signal from any of the claimed systems since any signal that indicates a higher probability of a collision would obviously have been usable.

Claims 11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Fohl as applied to claim 10 above, and further in view of Dybro et al (U.S. Pat. No. 5,529,258).

The admitted prior art does not explicitly state that electric motor is operated to rotate the reel in the normal (tightening) direction when the ratchet claw is engaged with one of the ratchet teeth.

Dybro et al teaches operating a seat belt tightener while an acceleration sensitive ratchet pawl 74 is in engagement with ratchet teeth 44 associated with a belt reel (col. 1, lines 28-36; col. 2, lines 55-62; col. 4, lines 54-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to operate the motor of the admitted prior art to tighten the belt while ratchet pawl is in engagement with the ratchet teeth as taught by Dybro et al to ensure that belt tension created by the motor is not lost.

With regard to claim 14, it would have been obvious to obtain the collision predicting signal from any of the claimed systems since any signal that indicates a higher probability of a collision would obviously have been usable.

Response to Arguments

Applicants' arguments filed 9/12/07 have been fully considered but they are not persuasive.

Applicants argue that Fohl and Taguchi et al do not suggest driving an electric motor in the normal direction based on a signal from a device other than an acceleration sensing weight even when a ratchet claw is engaged with a ratchet tooth. However, the admitted prior art discloses controlling an electric motor based on a collision predicting signal other than from an acceleration sensing weight. Releasing the pawl when such a signal is present would obviously not be desirable. Fohl teaches rotating a belt reel in a normal (winding) direction to release an engaged ratchet pawl. Dybro et al teaches

operating a tightening device even when a ratchet pawl is engaged with ratchet teeth of a belt reel to retain belt tension.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Mon. - Fri., 10:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

sjh
11/2/07

Peter M. Cuomo
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